TYPE MATERIAL IN THE HERBARIUM OF THE BOTANICAL SURVEY OF INDIA AT POONA[1]

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It is clearly specified in the latest International Code of Botanical Nomenclature (Stafleu, 1972) that all taxonomic groups of the rank of family and below must be based on nomenclatural types. A nomenclatural type is that constituent element of a taxon to which the name of the taxon is permanently attached, whether as a correct name or as a synonym. It is necessary to indicate the nomenclatural type on the basis of which a taxon is created with effect from first January, 1958, according to the code.

The herbarium of the Botanical Survey of India, Western Circle, Poona (*BSI*) includes nearly 100,000 specimens collected since the reorganisation of the Circle in 1956 besides the historical collections of Cooke (over 30,000) and Talbot (over 10,000). A new genus, 30 species and a variety have been described from this Circle after its reorganisation. The types of these taxa are deposited in the regional herbarium. However, the holotypes of the above taxa are deposited in the *CAL*. Some types have also been deposited here by a few workers from outside the department. In addition, there are a good number of type specimens in the Cooke's & Talbot's collections. Therefore, it was thought desirable to prepare a consolidated list of such material present in the regional herbarium for the benefit of taxonomists, who may wish to refer such taxa for monographic as well as floristic studies.

A total number of 465 type sheets are deposited in the herbarium which includes 63 & 80 sheets in Cooke's & Talbot's collections respectively, besides 5 type photos. These represent 91 species and 4 varieties belonging to 66 genera and 32 families, which include 17 taxa in Cooke's and 35 in Talbot's collections. On a scrutiny of distribution of these taxa it is seen that as much as 37 belong to Maharashtra & 41 to Karnataka, of which 22 are from Poona (mostly recent collections) and 33 from North Kanara (mostly in Talbot's collections) respectively. Of the remaining 13 taxa, 5 are from Goa, 3 from Tamil Nadu, 2 from Kerala and 1 each from Rajasthan, Andhra Pradesh & Gujarat. Poaceae (27) has the maximum number of types followed, by Asclepiadaceae (8) & Rubiaceae (6). The genera *Ceropegia* & *Manisuris* have 6 species each. A total of 19 holotypes (in Cooke's & Talbot's collections), 51 isotypes, 15 syntypes (mostly in Cooke's & Talbot's collections), 96 paratypes (mostly in recent collections) & 2 neotypes are present in the herbarium besides 5 type photos and 4 type sheets which cannot be categorised due to lack of authentic information about the same. Many of the sheets have been categorised on the basis of corraborative evidence including Talbot's manuscript notes & protologue containing the illustrations etc.

In the following enumeration the families are arranged in Bentham & Hooker's system of classification. The genera, species & varieties

[1] Accepted May 1978.

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are arranged in alphabetical order under each family. The original citation of each taxon along with name change, if any, is provided for easy location for reference. Under each taxon is given nature of type sheet with number within parentheses followed by locality, including the actual locality, district & State to which it belongs and Collector's name and number. The specimens belonging to Cooke's (C) & Talbot's (T) collections are indicated at the end in parenthesis. Doubts, if any, are indicated under each taxon individually.

Ranunculaceae

Clematis hedysarifolia DC. Syst. 1:148, 1817.

Type photo (1): Dasgown, in rupibus (Maharashtra), *A. P. Hove*. Herb. Musei Britannici.

Clusiaceae

Garcinia talbotii Raiz. ex Sant. Fl. Khandala (ed. 2) 14, 1960.

G. malabarica Talb. in J. Bombay nat. Hist. Soc. XI (2): 234, 1897 & (5): t. I, 1898.

Holotype (1) & *isotype* (1): Garsoppa ghat, North Kanara (Karnataka), *Talbot* 3713 (T).

Malvaceae

Abutilon ranadei Woodrow et Stapf in Kew Bull. 87: 99, 1894.

Type (1)(?): Ambaghat, Ratnagiri (Maharashtra), without collector's name & number. (C).

No number is given in the protologue but since the specimen cited is from the type locality, it may be considered a type sheet.

Balsaminaceae

Impatiens talbotii Hook. f. in Rec. bot. Surv. India 4(1): 42 & 47, 1904.

Type (1)(?): Devimoneghat, North Kanara (Karnataka), *Talbot* 3732 (T).

No number is given in the protologue but since the specimen cited is from the type locality, it may be designated a type sheet.

Meliaceae

Aglaia talbotii Sundararaghavan in Bull. bot. Surv. India 11 (1 & 2): 183-184, 1969.

A. littoralis Talb. Trees, shrubs & climbers Bombay Pres. (ed. 2) 76, 1902.

Holotype (1): Co-ompta, North Kanara (Karnataka), *Talbot* 2955 (T). *Paratype* (3): Co-ompta, North Kanara (Karnataka), *Talbot s.n.* (T): Karwar, North Kanara (Karnataka), *Talbot* 499-2955. (T).

Dysoxylum glandulosum Talb. Trees, shrubs & climbers Bombay Pres. (ed. 1) 39, 1894.

Syntype (6): Telgiri, North Kanara (Karnataka), *Talbot* 3808 (T).

Though no number is cited in the protologue, it is given here on the basis of Talbot's manuscript notes and of notes given on the sheets cited here.

Olacaceae

Strombosia leprosa Talb. in J. Bombay nat. Hist. Soc. XI(2): 235, 1897 & (5): t. II, 1898.

Paratype (2): Yellapore, North Kanara (Karnataka), *Talbot s.n.* (T); Potolli, North Kanara (Karnataka), *Talbot* 1736 (T).

The specimens are not mentioned in the protologue but are listed here on the basis of Talbot's manuscript notes.

Celastraceae

Gymnosporia konkanensis Talb. in For. Fl. Bombay Pres. Sind 1: 280, 1909.

Holotype (1): Monoli forest, Thana (Maharashtra), *Talbot s.n.* (T). *Paratype* (2): Parol forest, Bassein, Thana (Maharashtra), *Ryan*

1024; Tannah (Thana) (Maharashtra), *Talbot* 5155 (T).

Though no number is cited in the protologue, the holotype matches well with the illustration given there.

G. puberula Laws. in Hook. f. Fl. Brit. India 1: 619, 1875.

Type photo (1): Bombay, *Law s.n.* Kew Negative No. 6441 (1).

Salacia talbotii Gamble in Kew Bull. 1916: 133, 1916.

Syntype (1): North Kanara, *Talbot* 1217 (T).

Rhamnaceae

Ventilago maderaspatana Gaertn. var. **fructifida** Santapau in Kew Bull. 1949: 340, 1949.

Holotype (1) & *Isotype* (2): Khandala, Poona (Maharashtra), *Garade* 12(C).

Leeaceae

Leea talbotii King ex Talb. For. Fl. Bombay Pres. Sind 1: 329, 1909.

Holotype (1): Yellapore, North Kanara (Karnataka), *Talbot s.n.* (T). *Paratype* (3): Karwar, South Kanara (Karnataka), *Talbot s.n.* (T.).

Though no number is cited in the protologue, the holotype mentioned here matches perfectly with the illustrations.

Fabaceae

Alysicarpus vasavadae Hem. in Indian Forester 97(1): 65-69, 1971.

Isotype (4): Shivneri Fort Hill, Junnar, Poona (Maharashtra), *Hemadri* 104350 B-E. *Paratype*: Shivneri Fort Hill, Junnar, Poona (Maharashtra), *Rao* 83505 (2) & *Hemadri* 118101 (5); Kukdi river bank, Junnar, Poona (Maharashtra), *Hemadri* 104321 (3); Ganesh Caves, Junnar, Poona (Maharashtra), *Hemadri* 118132 (3).

Eleiotis trifoliata Cooke, Fl. Pres. Bombay 1: 342, 1902.

Syntype (3): Badami, Bijapur (Karnataka), *Cooke s.n.* (C).

Smithia agharkarii Hem. Indian Forester 97(1): 65-69, 1971.

Isotype (1): Dhak plateau, West of Junnar, Poona (Maharashtra), *Hemadri* 107486 B. *Paratype*: Hill above Tata Power Station, Khandala, Poona (Maharashtra), *Hemadri* 85171 A-I (9); Dhobi Falls, Mahableshwar, Satara (Maharashtra), *Mahajan* 24749 (1); Panchgani Road, Satara (Maharashtra), *Cooke s.n.* (1)(C).

Myrtaceae

Eugenia memecylifolia Talb. in J. Bombay nat. Hist. Soc. 11(2): 236, 1897 & (5): t. 5, 1898.

Holotype (1)& *Isotype* (3): Kalpa, North Kanara (Karnataka), *Talbot* 3127 (T).

E. utilis Talb. ibid. 11(2): 235, 1897 & (5): t. 3, 1898.

Holotype (1) & *Isotype* (1): Sonda, North Kanara (Karnataka), *Talbot* 3644 (T).

Syzygium kanarensis (Talb.) Raiz. in Indian Forester 74: 336, 1948. *Eugenia kanarensis* Talb. in J. Bombay nat. Hist. Soc. 11(2): 236, 1897 & (5): t.2, 1898.

Holotype (1): Mula muka, north Kanara (Karnataka), *Talbot* 3552 (T).

Apiaceae

Pimpinella katrajensis Rolla Rao et Hem. Indian Forester 102 (4): 232-34, 1976.

Isotype (6): Grown in Botanical Survey of India, Poona Garden, from the collections from Katraj Ghat, Poona (Maharashtra), *Hemadri* 108494 B-D & M-O. *Paratype*: Katraj Ghat, Poona (Maharashtra), *Hemadri* 81976 A-B (2); Panchgani, Satara (Maharashtra), *Ranade s.n.* (1)(C); Katraj Ghat, Poona (Maharash-

tra) *Cooke s.n.* (3) & *Bhide* 917 (1)(C).

Trachyspermum strictocarpum (C.B.Cl.) Wolff in Pfreich. 43: 89, 1927. *Pimpinella lateriflora* Dalz.; Hemadri in J. Bombay nat. Hist. Soc. 67(2): 355-357, 1970.

Neotype (6): Shivneri Fort, Junnar, Poona (Maharashtra), *Hemadri* 104346.

RUBIACEAE

Lasianthus sessilis Tab. Trees, shrubs & climbers Bombay Pres. (ed. 1): 114, 1894.

Holotype (1) & *Isotype* (1): Artabad, North Kanara (Karnataka), *Talbot* 1027 (T). *Paratype* (2): North Kanara (Karnataka), *Talbot* 266 (T).

Oldenlandia prainiana (Talb.) Craib in Kew Bull. 1910: 278, 1910. *Anotis prainiana* Talb. in J. Bombay nat. Hist. Soc. 11(2): 237, 1897 & (5): t. 6, 1898.

Holotype (1) & *Isotype* (4): Santaveri, Kadur, Chickmagalur (Karnataka), *Talbot* 2995 (T).

Psychotria canarensis Talb. Trees, shrubs & climbers Bombay Pres. (ed. 1): 113, 1894.

Holotype (1): Garsoppa, North Kanara (Karnataka), *Talbot* 257. *Paratype* (3): Garsoppa falls, North Kanara (Karnataka), *Talbot* 257-337, 337 & *s.n.* (T).

P. flavida Talb. ibid.: 113, 1894.

Holotype (1): Sonda, North Kanara (Karnataka), *Talbot* 3661 (T). *Paratype* (1): Nilkhurd, North Kanara (Karnataka), *Talbot* 3536 (T).

P. octosulcata Talb. in J. Bombay nat. Hist. Soc. 11(2): 237, 1897 & (5): t. VII, 1898.

Holotype (1): Siddapore, North Kanara (Karnataka), *Talbot* 3556 (T). *Paratype* (1): Without locality, *Talbot* 3764 (T).

Tarenna agumbensis Sundararaghavan in Bull. bot. Surv. India 10(3-4): 341-43, 1968.

Isotype (3): Barakana, Agumbe, Shimoga (Karnataka), *Sundara Raghavan* 62732 B-D.

ASTERACEAE

Blumea venkataramanii Rolla Rao et Hem. Curr. Science 42(19): 693-94, 1973.

Isotype (2): Vadgaon on Poona-Bombay Road, Poona (Maharashtra), *Hemadri* 118174 B-C. *Paratypes*: Pavnadam site near Vadgaon, Poona (Maharashtra), *Hemadri* 110794 A-C(3); Vadgaon, Poona (Maharashtra), *Hemadri* 108788 A-B (2); Ralegaon hills near Junnar, Poona (Maharashtra), *Hemadri* 68582 (1); Vanewade near Junnar, Poona (Maharashtra), *Hemadri* 68588 A-D (4).

Helichrysum cutchicum (C.B.Cl.) R. Rao et Desh. Bull. bot. Surv. India 10(2): 225-227, 1968. *Anaphalis cutchica* C.B.Cl. Comp. India 111, 1876.

Type photo (1): Kutch (Gujarat), *Dr. Stoliczka* 5396.

H. wightii C.B.Cl. in Hook. f. Fl. Brit. India 3: 291, 1881.

Type photo (1): Sisparaghat, Nilgherry hills (Tamil Nadu), Herb. R. Wight Prop. *Wight s.n.* Kew negative No. 5368.

Vernonia ornata Talb. in J. Bombay nat. Hist. Soc. 11(4): 691-92, t. XIII, 1898.

Holotype (1) & *Isotype* (1): Falls of Garsoppa, North Kanara (Karnataka), *Talbot* 2663 (T).

Though no number is cited in the protologue, the holotype matches well with the illustrations.

SYMPLOCACEAE

Symplocos kanarana Talb. ibid. 11(2): 238, 1897 & (5): t. IX, 1898.

Holotype (1): Ecunbi, North Kanara (Karnataka), *Talbot* 3673 (T). *Paratype* (1): Devimone ghat, North Kanara (Karnataka), *Talbot s.n.* (T).

ASCLEPIADACEAE

Ceropegia huberi Ansari in Bull. bot. Surv. India 10(2): 219-21, 1968.

Isotype (1) & *Paratype* (14): Ambaghat, Ratnagiri (Maharashtra), *Ansari* 105001 C & 105033 B-C & E-L & *Shevade s.n.* A-C (C).

C. mahabalei Hemadri et Ansari in Indian Forester 97: 105, 1971.

Isotype (4) & *Paratype* (2): Ralegaon, West of Junnar, Poona (Maharashtra), *Hemadri* 108070 B-E and 107266 A-B. *Paratype* (6): Hills adjoining Bhivade Khurd, Junnar, Poona (Maharashtra), *Hemadri* 107573 A-B & 117938 A-D.

C. noorjahaneae Ansari in J. Bombay nat. Hist. Soc. 69(1): 250-53, 1972.

Isotype (3) & *Paratype* (2): Wai-Panchgani ghat, Satara (Maharashtra), *Ansari* 104880 B-D & 105098 A-B.

C. rollae Hem. in Bull. bot. Surv. India 10: 223, 1968.

Isotype (7) & *Paratype* (10): Dhak Khilla, West of Junnar, Poona (Maharashtra), *Hemadri* 107471 B-C & I-L and 107547 A-B & E-L.

C. sahyadrica Ansari et Kulk. in Indian Forester 97 (2): 688-90, 1971.

Isotype (2): Ambolighat, Ratnagiri (Maharashtra), *Kulkarni* 108643 B-C. *Paratype* (12); Sinhagadh ("Singhar"), Poona (Maharashtra), *Garade* 57 A-C (C); Ambavne-Sakerpathar, Poona (Maharashtra), *Reddi* 98655, 98660, 98678, 99165 & 99212A; Ambolighat, Ratnagiri (Maharashtra), *Pataskar* 102141 A-B & *Kulkarni* 106321 A-B.

C. santapaui Wadhwa et Ansari in Bull. bot. Surv. India 10: 95, 1968.

Isotype (5) & *Paratype* (12): Mahabaleshwar-Mahad ghat road, Satara (Maharashtra), Wadhwa 109640 D & I-L and Wadhwa et Ansari 109651 B-D & I-O + one without alphabet.

Marsdenia lanceolata Cooke in Fl. Pres. Bomaby 2: 166, 1904.

Syntype (3): Lohagaon near Poona (Maharashtra), *Bhiva* (*babajee*) *s.n.* (C).

Seshagiria sahyadrica Ans. et Hem. in Indian Forester 97: 126, 1971.

Isotype (2): Sinhagad, Poona (Maharashtra), *Ansari* 87750 B-C. *Paratype* (5): Bhiwade Khurd, Durga hills, Junnar, Poona (Maharashtra), *Hemadri* 94360 A-B; Gureghar on Panchgani-Mahabaleshwar Road, Satara (Maharashtra), *Ansari* 105077 A-C.

Convolvulaceae

Neuropeltis malabarica Van Ooststr. in Blumea 5 (1): 272, 1942.

Paratype (2): Potoli, North Kanara (Karnataka), *Talbot* 2735 (T).

Acanthaceae

Nilgirianthus membranaceus (Talb.) Bremek. *op. cit.* in Verh. Nederl. Akad. Wet. (II) 40(1): 280, 1944. *Strobilanthes membranaceus* Talb. Trees, shrubs, & climbers Bombay Pres. (ed. 2): 261, 1902.

Syntype (3): Anmode, North Kanara (Karnataka), *Talbot* 1616 (T).

Strobilanthes minor Talb. Trees, shrubs & Climbers Bombay Pres. (ed. 2): 262, 1902.

Holotype (1) *Isotype* (2): Kala Nuddi, Supa, North Kanara (Karnataka), *Talbot* 1338 (T).

Lamiaceae

Leucas angustissima Sedgwick in J. Indian Bot. 2(3): 124, 1921.

Syntype (1): Siddapore, North Kanara (Karnataka), *Talbot* 3740 (T).

L. deodikarii Bill. et Hem. in Indian Forester 96: 858, 1970.

Isotype (1): Dhak Khilla, Junnar, Poona (Maharashtra), *Hemadri* 117970 B. *Paratype*: B.S.I. Experimental Garden, Poona (Maharashtra), *Billore* 115985 A-C & M-O (6); Foot of Ras Cha Jungle near Gadad, Khed Taluka,

Poona (Maharashtra), *Janardhanan* 76249 A-B (2): Ghatghar, Junnar, Poona (Maharashtra), *Hemadri* 120584 A-B (2); Bhivade Khurd, Junnar, Poona (Maharashtra), *Hemadri* 117933 A-B (2); Balighat near Tombe, Junnar, Poona (Maharashtra), *Hemadri* 117830 A-B (2); Malvand dara, Bhivade Khurd, Junnar, Poona (Maharashtra), *Hemadri* 107555 A-B (4) & 118025 (1); Ghat top (Vinchu Cha Nal) near Igatpuri, Thana (Maharashtra), *Billore* 110557 A-B (2), 116170 A-E (5) & 116796 A-B (2); Kedarnath Hill slope, Harishchandragarh, Thane (Maharashtra), *Billore* 115621 A-B (2).

Plectranthus parvifolius Talb. in J. Bombay nat. Hist. Soc. 11(2): 238, 1897 & (5): t. 10, 1898.

Paratype (1): Jungles W. Potolli, North Kanara (Karnataka), *Talbot* 1739 (T).

It is given here on the basis of Talbot's manuscript notes.

Polygonaceae

Polygonum hydropiper Linn. var. **glandulosissima** Cage in Rec. Bot. Surv. India 2: 401, 1903.

Isotype (2): Dandeli, North Kanara (Karnataka), *Talbot* 2682 (T).

Lauraceae

Cryptocarya procera Talb. in For. Fl. Bombay Pres. Sind 2: 385, 1911.

Holotype (1): Nilkund, North Kanara (Karnataka), *Talbot* 2872 (T).

Though no number is cited in the protologue, the specimen is mentioned here on the basis of Talbot's manuscript notes.

Loranthaceae

Dendropthoe gibbosa (Talb.) Razi in Lloydia 20: 242, 1957. *Loranthus gibbosus* Talb. in Trees, shrubs & climbers Bombay Pres. (ed. 2): 289, 1902.

Type (1): Yellapore, North Kanara (Karnataka), *Talbot s.n.* (T).

Since the specimen cited is from the type locality, it may be a type sheet.

Viscum mysorense Gamble in Kew Bull. 1925; 329, 1925.

Type photo (1): Araikere, Hassan (Karnataka), *Meebold* 8207.

V. trilobatum Talb. in For. Fl. Bombay Pres. Sind 2: 419—20, 1911.

Holotype (1): Yellapore, North Kanara (Karnataka), *Talbot s.n.* (T).

Though no number is mentioned in the protologue, the said specimen matches with the illustration given there.

Balanophoraceae

Acroblastum ambavanense Reddi in Willdenowia 5/3: 389—93, 1969.

Isotype (1): Kate Pani Forest near Ambavane Village, Poona (Maharashtra), *Reddi* 99494 b.

Euphorbiaceae

Euphorbia katrajensis Gage in Kew Bull. 1914: 236, 1914.

Syntype (2): Katraj hills, Poona (Maharashtra), *Kanetkar s.n.* (C); Katraj ghats, Poona (Maharashtra), *Shevade* s.n. (C).

Phyllanthus talbotii Sedgwick in J. Indian Bot. 2(3): 124, 1921.

Syntype (1): Falls of Garsoppa, North Kanara (Karnataka), *Talbot* 828 (T).

Urticaceae

Ficus talbotii King, Sp. Fic. in Ann. Roy. Bot. Gard. Calcutta 1: 51, t. 63 & 84, Fig. Q, 1888.

Syntype (2): Sircy & Yenna rocks, North Kanara (Karnataka), *Talbot* 655 & 1100 (T).

HYDROCHARITACEAE

Blyxa talbotii Hook. f. in Fl. Brit. India 5: 661, 1888.

Isotype (2): North Kanara (Karnataka), *Talbot* 920 (T).

ORCHIDACEAE

Dendrobium mabelae Gammie in J. Bombay nat. Hist. Soc. 16(4): 567, 1905.

Type (1)(?): Castle rock, North Kanara (Karnataka), *Gammie* s.n. (C).

No number is cited in the protologue but since this is Gammie's specimen, collected prior to his publication of this species, it may be a type sheet.

LILIACEAE

Chlorophytum bharuchae Ans., Raghavan et Hem. in Indian Forester 96: 304, 1970.

Isotype (5) & *Paratype* (7): Shivneri fort, Junnar, Poona (Maharashtra), *Ansari* 88712 B-F (5), *Hemadri* 107097 (3) & 94310 (4).

COMMELINACEAE

Cyanotis arcotensis Rolla Rao in Blumea XIV (2): 345—48, 1966.

Isotype (1): Tippu kadu R.F., North Arcot Dist. (Tamil Nadu), *Joseph* 89886B.

C. cerifolia Rolla Rao et Kammathy in J. Linn. Soc. Bot. 59 (379): 305, 1966.

Isotype (1): Experimental Garden of the Circle, Poona (Maharashtra), *Kammathy* 77785 B. *Paratype* (1): Waverly Estate, Anamalis (Kerala), *Kammathy* 73950 A.

ARACEAE

Arisaema caudatum Engler emend Rolla Rao & Ahuja in Bull. bot. Surv. India 11 (3-4): 450—52, 1969.

Isoneotype (2): Panchgani Plateau, Satara (Maharashtra), *Ansari* 105095 B.

ERIOCAULACEAE

Eriocaulon horsley-kundae Fyson in J. Indian Bot. Soc. 3 : 13, 1922.

Isotype (1): Guddapah (Andhra Pradesh), *Gamble* 20985 (T).

CYPERACEAE

Cyperus pentabracteatus Govind. et Hem. in Proc. Ind. Acad. Sci. 82 (B)(6): 205—210, 1975.

Isotype (1): Durga Khilla plateau, Junnar, Poona (Maharashtra, *Hemadri* 107562 B.

Fimbristylis unispicularis Govind. et Hem. *ibid.* 205—210, 1975.

Isotype (3): Durga khilla plateau, Junnar, Poona (Maharashtra), *Hemadri* 107528 B-D.

F. woodrowii Clarke in J. Linn. Soc. 34 : 68, 1899.

Syntype (2): Khandala, Poona (Maharashtra), *Woodrow* s.n. (C).

POACEAE

Arthraxon deccanensis Jain in J. Bombay nat. Hist. Soc. 68 : 297—99, 1971.

Paratype (2): Sinhagad, Poona (Maharashtra), *Vartak* 5884/6; Sitabai Dara, Arvi, Haveli, Poona (Maharashtra), *Ansari* 99978.

A. junnarensis Jain et Hem. ibid. 68 : 300—301, 1971.

Isotype (2): Warsubai, Junnar, Poona (Maharashtra), *Hemadri* 106849 B-C. *Paratype* (2): Wilson Point Road, Mahabaleshwar, Satara (Maharashtra), *Mahajan* 27170 A-B.

A. lancifolius (Trin.) Hochst. var. **hindus-**

tanicus Jain et Desh. in J. Indian bot. Soc. 51(2): 176, 1972.

Isotype (3): Chapora, Kaisuva fort (Parvorim), Goa, *Cherian* 88557 B-D. *Paratype* (4): Ganesh Caves, Junnar, Poona (Maharashtra), *Hemadri* 118151 A-B; Ajoba hill slope, Washala range, Thane (Maharashtra), *Billore* 111947 A-B.

A. raizadae Jain, Hem. et Desh. in J. Indian bot. Soc. 51(2): 103—6, 1972.

Isotype (3): Mahabaleshwar, Satara (Maharashtra), *Hemadri* 98585 B-D. *Paratype*: Mahabaleshwar, Satara (Maharashtra), *Hemadri* 98546 A-D (4), 98550—A-E (5), *Mahajan* 24757 (1) (Dhobi Falls), 13048 (2) (Near Venna Lake), 24725 (1) (Babington Point), *Ansari* 67704 (2) (Lingmala Falls area), 67571 (2) Old Mahabaleshwar Road), 67663 (2) (Along Mahad road ghat), *Kanodia* 87054 & 87059 (4) (Near Gureghar Nursery), & *S. R. Rolla* 71739 (2) (on way to Pratapgad).

Bhidea burnsiana Bor in Kew Bull. 1948: 445, 1949.

Isotype (2): Lonavla, Poona (Maharashtra), *Bhide* 20724 (C).

Bothriochloa jainii Deshp. et Hem. in Indian Forester 97(10): 593, 1971.

Isotype (2): Durga hills, Junnar, Poona (Maharashtra), *Hemadri* 104241B—C. *Paratype*: Junnar, Poona (Maharashtra), *Hemadri* 120572 (2) (Ghatghar), 104401(2) (Durga khilla), 108222 (2) (Dhak Khilla) & *Vartak* 11944 (1) (Raireshwar); Tiskari Forest outskirts, Ambavane, Poona (Maharashtra), *Reddi* 95800 (6); Top of Masgaon hill, Ambavane, Poona (Maharashtra), *Reddi* 99471 (2); Lingmala Falls, Mahabaleshwar, Satara (Maharashtra), *Mahajan* 13075 (6); Taramati Hill slope, Harishchandragad, Thana (Maharashtra), *Billore* 115689 (3).

Capillipedium magdaleni Almeida in J. Bombay nat. Hist. Soc. 72(3): 813—14, 1975.

Isotype (1): Agumbe, Shimoga (Karnataka), *Almeida* 2941.

Cynodon barberi Rang. & Tad. ibid. 24: 846, 1916.

Syntype (1): Coimbatore (Tamil Nadu), *Rangachari & Tadulingam s.n.* (C).

Danthonidium gammiei (Bhide) C. E. Hubb. in Hook. Ic. Pl. subtab. 3331, 1937.

Danthonia gammiei Bhide in J. et Proc. Asia. Soc. Bengal n.s. 7: 513, 51, t. 6, 1911 (1912).

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Dimeria santapaui Almeida in J. Bombay nat. Hist. Soc. 66: 510, 1969.

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Isotype (4): Marmagoa, Goa, *Talbot* 2557 (T).

Enteropogon monostachyos (Vahl) K. Schum. ex Engl. in Abh. Preuss. Akad. Wiss. 17, 1894 et in Planzenw. Ost-Afr. C, 110, 1895. *E. badamicus* Bhide in J. et Proc. Asia. Soc. Bengal, n.s. 7: 514, 1911 (1912).

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Isachne borii Hemadri in Indian Forester 97: 223, 1971.

Isotype (4): Dhak plateau, Junnar, Poona (Maharashtra), *Hemadri* 117968 B-E. *Paratype* (3): Plateau above Bushi Lake, Lonavla, Poona (Maharashtra), *Reddi* 98672 A-C.

I. mysorensis Sundararaghavan, ibid. 97(6): 304—07, 1971.

Isotype (4): Kandadagudda near Agumbe, Shimoga (Karnataka), *Sundararaghavan* 90008 B-E.

Ischaemum raizadae Hem. et Bill. ibid. 96:

318, 1970.

Isotype (11): Sadryaghat near Harishchandragarh, Thana (Maharashtra), *Billore* 115450 C-F & I-O. *Paratype*: B.S.I. Exp. Garden, Poona (Maharashtra), *Billore* 115984 A-E & G-Q (15); Ambolighat, Ratnagiri (Maharashtra), *Kulkarni* 119225 A-F (6); Amba, Ratnagiri (Maharashtra), *Bhide* 15 A-B (2) (C); Ambewadi, Nasik (Maharashtra), *Patwardhan* 1115 (C).

Lasiurus ecaudatus Satya. et Shank. in J. Bombay nat. Hist. Soc. 60(3): 763-66, 1963.

Isotype (1): G. R. Farm, Jodhpur (Rajasthan), *Satyanarayan & Shankarnarayan* 719.

Manisuris acuminata (Hack.) O. Ktze. var. **woodrowii** Bor in Grass. Burma, Ceylon, India & Pakistan 191, 1960.

Syntype (4): Vasco-da-Gama, Goa, *Bhide s.n.* (C).

M. forficulata Fischer emend. Jain in Bull. bot. Surv. India 12(1-4): 12-14, 1970.

Paratype (2): Ambolighat, Ratnagiri (Maharashtra), *Talbot* 4305 C/2 (T).

M. goaensis Rolla Rao et Hem. ibid. 10: 106, 1968.

Isotype (2): Near Verna village in Cortalim—Madgao Road, Goa, *Rolla S. Rao* 84474 B-C. *Paratype* (2): Near Porvorim village, Goa, *Rolla S. Rao* 92850 B & D.

M. mysorensis Jain et Hem. ibid. 10: 280-82, 1968.

Isotype (1): Castle rock, North Kanara (Karnataka), *Gammie* 15643 (C). *Paratype* (1): Ambolighat, Ratnagiri (Maharashtra), *Talbot* 4305 (T).

M. ratnagirica Kulk. et Hem. in Indian Forester 100: 250, 1974.

Isotype (5): Chakul Road, Ambolighat, Ratnagiri (Maharashtra), *Kulkarni* 121638 B, D, M, N & O. *Paratype* (7): Soliya jungle, Amboli, Ratnagiri (Maharashtra), *Kulkarni* 119190 A-D & I-K.

M. santapaui Jain et Deshp. in Bull. bot. Surv. India 10 (3-4): 277-79, 1968.

Isotype (1): Ratnagiri (Maharashtra), *Saldanha* C5/7130 B.

M. talbotii (Hook. f.) Bor, Grass. Burma, Ceylon, India & Pakistan 192, 1960.

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Isotype (1): Marmagoa, Goa, *Talbot* 2572 (T).

Oropetium roxburghianum (Steud.) S. M. Philips. Kew Bull. 30(3): 469, 1975.

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Oryza malumpuzhaensis Krish. et Chandr. in Madras Agric. J. 45: 471-72, 1958.

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Isotype (1): Matheran, Colaba (Maharashtra), *Woodrow s.n.* (C).

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ACKNOWLEDGEMENTS

We are thankful to Dr. S. K. Jain, Joint Director-in-charge, Botanical Survey of India, Howrah for facilities & to Dr. M. P. Nayar, Deputy Director, Western Circle, Poona for encouragement and also for kindly going through the manuscript.